

**HIGH SPEED FIXED WIRELESS
VOICE/DATA SYSTEMS AND METHODS**

ABSTRACT OF THE DISCLOSURE

Systems and methods adapted to optimize data throughput in wireless communications network are shown and described. In the preferred embodiment multiple antenna beam base stations are utilized to provide reuse of communications channels. Reuse of the communications channels by the base stations is preferably optimized by considering mutually exclusive antenna beam pairs and antenna beam pairs providing reduced signal quality. A preferred embodiment control channel is taught which provides for the initial and subsequent identification and use of a most preferred antenna beam for establishing communications. Alternative embodiments of the invention utilize multiple antenna beam remote stations.